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☞ *See Advertisement on last page.*

KITTY CREAGH.

I.

" Oh ! tell me now where are you going,
" Misther Maguire ?"
" The twigs in the hazel glen growing,
" Make a good fire."
" The turf in the bog's nearer, Kitty,
And fitter for firing they say ;
Don't think me a goose,
Faith I *twig* your excuse,
Sly Kitty Creagh."

II.

" We're saving our turf for the winther,
Misther Maguire ;
And your jibes and your jokes shall not hinder
What I require."
" Ah, I know why your'e going there,
Not *fire*, but a *flame* you should say,
You seek in the shade,
Of the hazel wood glade—
Sweet Kitty Creagh !"

III.

" There's a stream through that hazel glen flowing,
Sweet Kitty Creagh ;
Where I see with his fishing rod going,
Phelim O'Shea ;
'Tis not for the nuts *you* are seeking,
Nor gath'ring of fuel in May,
And 'tis not for catching trout
That young Phelim's about—
Sly Kitty Creagh !"

I TOLD YOU SO.

Old Hodges was ever annoyed with the din
Of " I told you so dear—I knew it would be;"
Till his patience at length becoming quite thin
He resolved upon taking a regular spree.

His spree being o'er at the end of the week,
He turned himself homeward, disgusted with life,
The tears, in big drops coursing down his wan cheek,
As he thought of his home and his termagant wife.

On reaching his house he sat himself down ;
" Old woman," said he, I am going to die :
I swallowed a mistone as I came up from town,"
" I told you so, husband,"—was her only reply.

Wit in rhyme.

A queer joker sat at a window one night,
And saw the moon shining with silvery light,
He spoke to a grain buyer then in the room :
" Have you a desire to buy up the moon !"
" Why, zounds !" said the stranger, " pray what do you mean ?
D'ye think I'm a fool, sir, do I look green ?"
" I thought it no harm," he replied, " to enquire :
I see it is rising, and soon will be higher !"

A waggish friend of ours, says the Worcester Budget, attempted to count the *sleepy heads* in church yesterday—he reached as high as fifty, and then—fell asleep himself.

CORN PLANTER.---Figure 1.

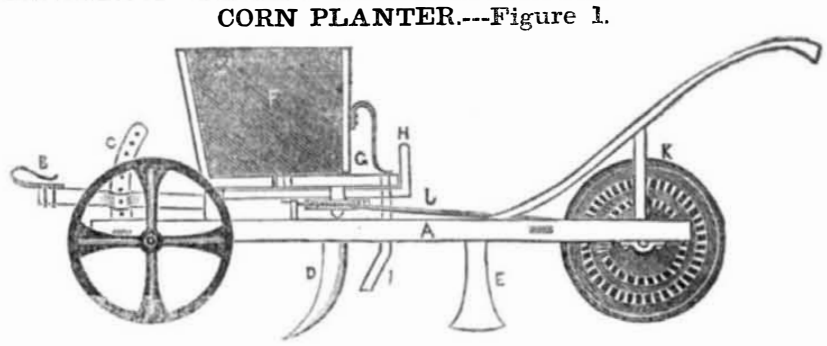
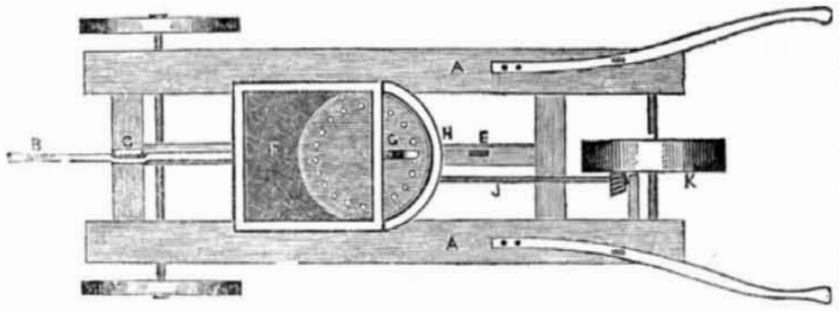


Figure 2.



EXPLANATION.—Fig. 1 is a longitudinal elevation, partly sectional, and fig. 2, is a vertical view or plan of the machine. A square horizontal frame A A is mounted on three wheels, two forward and a central wheel K as a follower. The machine is furnished with a draught beam and hook B with a graduating post C, a furrowing coulter D and a furrow filler or coverer E. This last consists of two parallel oblique plates, the forward edges of which diverge from each other so as to draw the soil from the sides and fill the furrow made by the farrowing coulter. The rear of the frame is furnished with handles like those of a plough. Near the forward wheels is mounted a hopper F, a sectional view of which is shown in fig. 1. This is made of cast iron, and in the bottom thereof is a circular recess or cavity in which is placed a horizontal drop-wheel G, the axle of which projects downward, as shown in fig. 1, and carries a small wheel having screw-teeth, into which takes the thread or worm of a revolving screw, the shaft of which extends back to the follower wheel K, and terminates in a pinion which takes to a series of geer teeth which project from the side of the follower, as seen in fig. 1. Thus by the rolling motion of the follower the screw shaft and the drop wheel are put in motion. The drop wheel G, is perforated with a series of holes arranged in a circle as shown in fig. 2, and immediately under the near side of this wheel, is adjusted a tube I ; and immediately over this tube, a bent spring G presses gently on the wheel. It will be seen that the rear of the drop-wheel is enclosed by a semicircular curb H. The hopper being filled with corn or seeds, each of the holes in the drop-wheel is supposed to be filled before passing from the interior of the hopper to the curb-space, and when the same is brought into contact with the tube I, the contents, whether a single kernel, or several, are dropped through the tube to the furrow. By means of several circles of teeth in the side of the follower, the pinion can be adjusted to give the required motion to the drop-wheel. This machine has been recently invented by E. J. Dickey, Hopewell, Pa., who intends to apply for a patent therefor.

A Receipt for Happiness.

An exchange gives the following excellent piece of advice, which is by no means "bad to take." It is simply when you rise in the morning to form a resolution to make the day a happy one to a fellow creature. It is easily done—a left-off garment to the man who needs it: a kind word to the sorrowful ; an encouraging expression to the striving—trifles in themselves as light as air—will do at least for the twenty-four hours, and if you are young, depend upon it, it will tell when you are old ; and if you are old, rest assured that it will send you gently and happily down the stream of human time to eternity. Look at the result : You send one person—only one—happily through the day ; that is, three hundred and sixty five in the course of the year—and supposing you live only forty years after you commence this course, you have made fourteen thousand six hundred human beings at all events happy for a time. Now, worthy reader, is not this simple ? and is it not worth accomplishing ? We do not often indulge in a moral dose—but this requires to be taken but once a day, and we feel warranted in prescribing it. It is most excellent for digestion, and a producer of pleasant slumber.

True Christians are said to be like stars, that shine brighter in the darkest night ; like gold, that is brighter for the furnace ; like the camomile plant, that grows faster when trampled upon.

The Deadly Foe of the Snake.

Attack and defence call forth, perhaps, some of the most beautiful combinations of effect and passion which can be conceived ; as, for instance, in the secretary bird and the snake. In an instant the former circumvents its intended prey : its escape is hopeless, It instinctively feels itself in the presence of its deadly enemy, and for the preservation of life prepares itself for the fearful encounter. Half erect, with gleaming eye, and its body coiled or straightened to meet the exigency of the moment, it faces its ever active foe ; it writhes and sweeps the ground with the convulsive movements of its tail, and, like the skilful fencer, acts on the defensive till the opening for the fatal lunge presents itself; but the wary bird allows no such advantage, for dropping its wing, shield like, before it, it repels every attack by prostrating the serpent by the powerful action of its pinion, and leaping rapidly behind it, secures the victory and its prey by a well directed blow on the skull, This is a beautiful picture ; the issue of life is the struggle, of which nature is the prompter, and in which the energies and passions of both creatures are worked up to the highest pitch.—Dreaded by every other living creature, the snake here encounters its mortal enemy, ordained by the hand of Providence to keep its race within due limits.

The U. S. House of Representatives evince but a slight disposition to secure the rights of inventors by improving the Patent Laws.

Poetical Prose.

(Written, we should say, on New Year's day, for the St. Louis Reveille.)

We needn't say that on this propitious day we desire to pay—and, being in funds, we may—our respects—asking pardon for past neglects—unto our patrons—men, maids, or matrons. If frozen,—without any toes on,—or even nose on, we should, and would, nevertheless, we guess, thaw out, hold our paw out, and shake every ache, no mistake,—of mind or body,—whether arising from time or toddy, —right out of us,—at this season " divil a doubt of us." " Once a year," and whether cloudy or clear, who feels not, if his blood selfishly steals not, that man is his brother, and that we ought to love one another,—that is *in reason* ; say once a season ! Home and its sweet graces—children's faces ; smiles and joy, and old *Kriss Kringle* ; laugh and shout ; hark, how they mingle ! Then the toys broke ;—while the misses, with their dolls and kisses, and the calmer parent blisses, invest the hearth—in fact the earth—with a charm worth striving for ! We feel what we're living for !—O'er care victorious !—We get glorious ! We—we—*brother*, let's take *another !*

Serving a Writ on a Parson.

In one of the eastern towns—no matter precisely where, nor precisely when—a gentleman of the bar was about committing a matrimony. The company had assembled, the parson was in attendance, and the bridegroom rose to hand his reverence the certificate of publication, according to law made and provided As a lawyer he could do wonders before a bench and jury but this was a new case, he was sadly embarassed, and after fumbling awhile in his pocket, handed the parson the wrong paper. His reverence glanced his eye over it, and with a good natured smile, told him he believed he had made a mistake, and handed it back. It happened to be a *writ !* The poor lawyer was now doubly embarrassed and fumbled again in his pocket, handed out another paper. After looking at this, the parson smiled again, but seeing the perturbation of the matrimonial candidate, forbore to notice a second mistake, and proceeded to tie the knot. On the morrow, the happy bridegroom was much surprised to find this second certificate returned to him, with the request of the parson to forward the true one. He opened it and found it was his *tailor's bill !*

The Poetry of Life.

The poetry of life ! What may that be ? The beautiful, and still the true, let the prose mongers clamor as they will. The leafy wood —the wild bird's song—the winter's snow—the summer's shine—the mother's smile—the father's beaming eye—love, courage, energy —there is poetry in these, and a thousand things beside ; aye, in the very air we breathe, and in the earth on which we tread, which only need feel the seeking for to find. Who finds the precious ore ? Not he whose careless eye looks on the surface only ; but he who delves beneath. The cold and dull are dead to half the joys which quicker, loftier spirits revel in.

The Pyramids of Egypt.

Mr. Giddon makes the following statement : —" The granite contained in the great pyramid would be sufficient for all the building of the churches and and public buildings in Philadelphia, and the quantity of other materials, if converted into brick, would build all the dwellings in that city. There is material sufficient in the three largest pyramids, to erect all buildings, public and private, in the State of Pennsylvania.

The Hog crop of the United States, this year, is three times the worth of the cotton crop, and the maintenance thereof is estimated at 200,000,000 bushels of corn.

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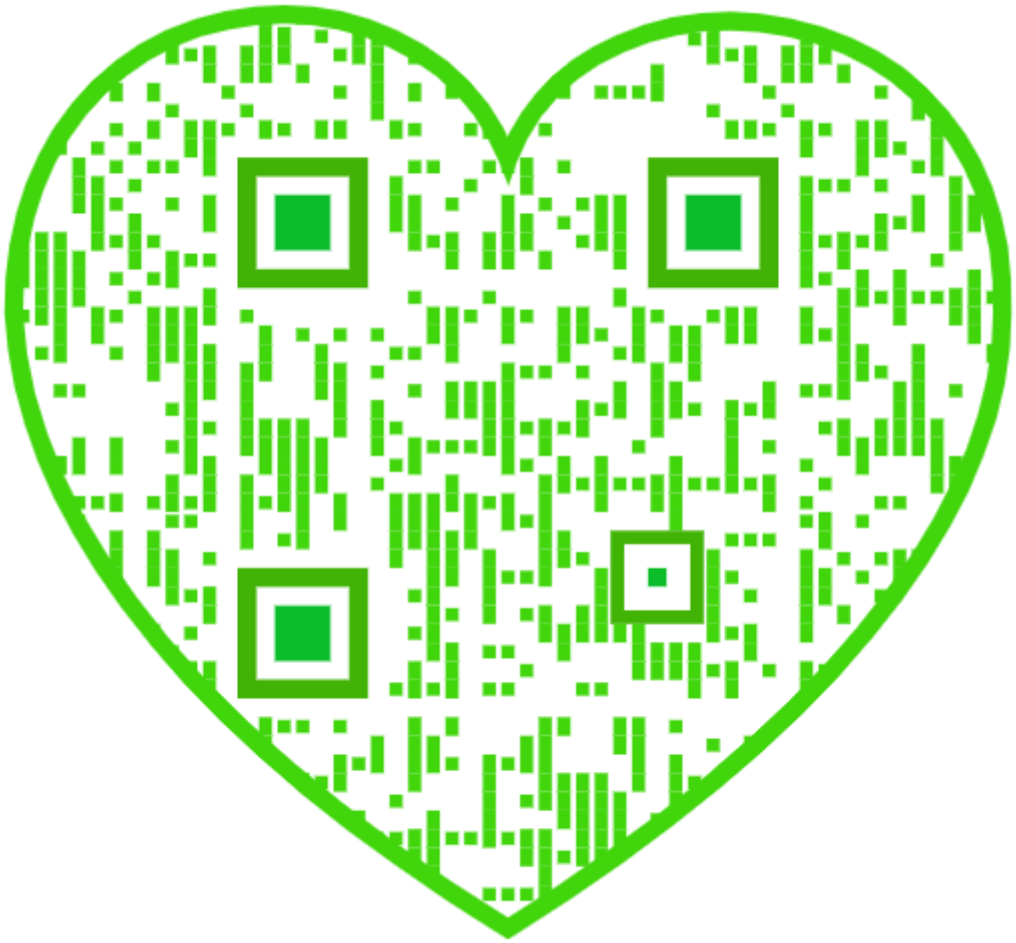

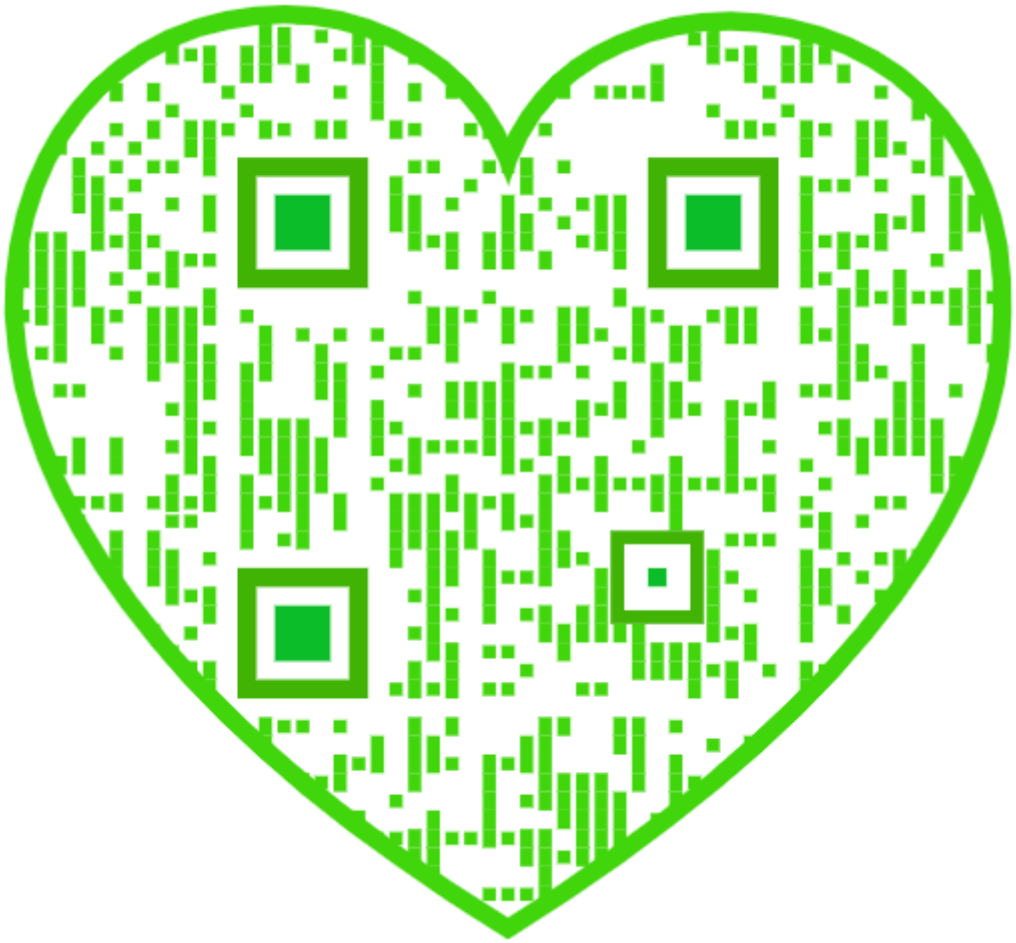

Recent Fires.

In Boston, last week an extensive conflagration occurred, in which more than one hundred houses, shops and other buildings were destroyed. It commenced in a bowling alley on Haverhill street, and the wind being high, nearly all the wooden buildings between Haverhill and Medford streets were swept off from Causeway street to the depot of the Boston and Maine railroad in Haymarket Square.

At Westerly, R. I., a cotton factory, woolen factory, grist-mill and dwelling-house have been destroyed. Most of the property was owned by E. H. Babcock & Co.

At Charlestown, Mass., a three story building, occupied by a Mr. Locke, for the purpose of cutting stone by steam, was, with its contents, totally destroyed by fire on the 13th inst. Loss of Mr. Locke, $10,000.

At Meadville, Penn., six dwelling-houses and four stores were destroyed by fire on the 9th inst.

At Hempstead Harbor, a sloop with a cargo of hay on deck was consumed on Wednesday night of last week. The burning vessel and the blazing bales of hay which floated around her, formed a striking spectacle, seen from the shore.

At Dubuque, Iowa, five buildings, belonging to Messrs. H. Simpton, M. Bourgois, N. Navion, F. Smith and J. Sullivan, were consumed.

At Lexington, Ky., four or five buildings, including a hotel and several shops, destroyed on the 10th inst.

At Clinton farm, near Cincinnati, the largest barn in Ohio was consumed with its contents of hay, grain, machinery, &c. Loss $10,000.

New site for a Railroad.

The principal objection to making New Orleans a terminus for a line of trans-atlantic steamships, has been the bar at the mouth of the Mississippi. A fine harbor has been discovered on the Gulf, and from this place, known as *Cat Island, it is* proposed to run a railroad to New Orleans, a distance of sixty miles, which will be a quicker and cheaper route, the distance from the bar being 110 miles.

Enterprise in Saratoga Co.

Within a year past the village ot Victory has sprung up about a mile from Schuylerville, and bids fair to soon become a place of importance. It already numbers upwards of one hundred inhabitants, and the population will probably be doubled in a few weeks when certain new mills go into operation.

Inventor of Evil Things.

We understand that a Mr. Brown has made application to Congress for an appropriation for making experiments with "streams of liquid fire." This appears to be a "new and improved" mode of torture, never thought of by the Spanish inquisition.

Munificence.

We learn from a Milwaukie paper that Mr. Amos A. Lawrence of Boston has offered to give the sum of $20,000 in aid of establishing a Literary Institution in Wisconsin, on condition that an equal amount may be furnished by the citizens of the state. It is possible that Mr. L. owns lands in the vicinity of the most favorable site for the institution.

Mr. Webster and the Rummies.

The Massachusetts License Law question has been again argued, before the U. S. Court at Washington, by Messrs. Webster and Davis of Mass. Mr. Webster taking the side of the rumsellers against the constitutionality of restricting the sale of liquors: in other words, against the right of a State Government to suppress the prevalence of intemperance.

Marshal and Clay.

Thomas F Marshal of Kentucky, was the leader of the mob which destroyed or removed the press of Cassius M. Clay. They are now both captains of volunteer companies in Mexico, and are said to be on the most friendly and intimate terms

The Late Explosion.

We are reluctant to notice railroad accidents; but this unprecedented casualty, so extraordinary in its effects, deserves more than a passing notice:—The cause of the explosion is of course, enveloped in mystery, and can only form the subject of conjecture. The boiler exploded upwards and outwards, throwing the driving wheels out each side, tearing the engine to pieces, staving in the tank, wrecking the tender, damaging half a dozen of the cars, and producing altogether, the most frightful wreck of the kind ever beheld. The body, or rather the trunk of the body of one of the men that tended the brake, was thrown up a hill, the distance of at least two hundred and fifty feet. Beside, or near him, were two pieces of iron from the boiler, weighing two or three hundred pounds each, that were found indented some two and a half feet into the ground. Another body was found upon a small island of ice in the stream, that had been blown through a large tree, in the limbs of which parts of the clothing were found hanging. The body supposed to be that of the engineer, was discovered driven into the water tank. A body was found with nothing on it save a scarf around his neck, others with only pieces of the flannel shirt. Out of the seven bodies, there was not more than one that was whole enough to be recognised with any certainty. The head of one of the men was found mashed to a jelly, another was found separated from the trunk, and an arm was picked up in a field with a tin cup in the hand The corpses were all horribly mutilated, torn burnt and blackened. The report of the explosion was tremendous: It was heard a great distance, and the concussion shook the windows four miles from the scene.

Weather in Ohio.

Our readers in these parts hardly need be told that we have had the greatest variety and *quantity* of weather since our last. First remarkably warm with drenching rains, producing disastrous floods, and mud of unknown depths—then, presto! cold enough to freeze the blood of a Laplander; the thermometer down to 10 or 15 degrees below zero, and water and mud all congealed together. Now it again relents and there is a promise of a thaw, with perhaps rain. But we dare not trust in such promises any more.—*Ohio Cult.*

Enterprise in Massachusetts.

A new cotton factory is soon to be built at the Milteneag falls in West Springfield, the stock having been principally taken up in Springfield. An extensive papermill is about being erected in South Hadley, by Colonel E. Moody.

Beating with Lightning.

A new mode of punishment has been introduced at the Clinton County prison, which consists of severe and repeated shocks of electricity. This reminds one of the expressed wish of Gen. Wilkinson for the "red artillery of heaven" to thrash the British with.

Powerful Machinery.

We are informed that a double engine and corresponding hydraulic machinery, is in progress of construction in this city, for the New Orleans Water Works. It is expected to raise six millions of gallons to the height of 150 feet, every twenty-four hours; the water to be taken from the Mississippi for the supply of that city.

Mexican Luxuries.

Tampico is spoken of as a terrestial paradise. In December they were luxuriating on green peas, oranges, bananas, lemons, canvass back ducks, teal, &c. which sell at prices remarkably cheap. Canvass backs are sold at one cent a pound.

Musical Sounds.

The lowest sound which can be called musical, is produced by 16 vibrations in a second of time; though some ears are so constituted as to be able to appreciate notes at both extremities of the scale, which are inaudible to others.

A Casting Vote.

At a late election for constables in Louisiana, a certain person was elected by one vote, and it is shrewdly surmised that he gave that vote himself, as he was the only person seen about the polls.

Hon. Mike Walsh.

This conspicuous member of the Assembly appears to be working wonders in his peculiar way, and is doing the public more service than a score of the formal, customical, apeoparrotic members. In a recent speech he fully exposed the sinister objects of a party of mercenary scamps who are hanging round the capitol, ready to grab the $10.000 appropriation, as soon as it passes. He showed the House that the appropriation of $6000, made by the New York Common Council, to aid the New York volunteers, was pocketed by the officers, and that the poor soldiers never received a penny of it.

Wonderful Machine.

Under this attracting head, the "True Sun" has an article on what purports to be a new invention produced by a person in the New Jersey State Prison, and whereby the members of a legislative assembly can signify their votes yea or nay, by electing and pulling one of two bobbins, &c. To those who have seen our plan of a perfect and invisible voting apparatus published with illustrations in No. 8 of this paper, the description of the Jersey prison invention will appear rather flat.

Enterprise in Charleston, S. C.

The Common Council of Charleston, on the 19th instant, appointed a special committee to subscribe $20,000, if so much be necessary, towards securing the charter of the Gas Company of that city, and appropriated $5000 to establish the line of Telegraph from New York via Charleston to New Orleans.

Ready Reason.

"They treated me very shabbily when I was in Boston," said a Cockney to a a Yankee. "That was because you was an Englishman," was the reply. "But," says the first, "an American was with me, and they treated him as they did me." "That was because he was in bad company," was the best word heard in the conversation.

Providential.

The roof of Washington Hall, Charleston, Mass., fell in with a tremendous crash, a few days since. It had been occupied by dancing parties almost every night during the season, but was free from company when the crash occurred. The building was nearly new, and its builder is severely censured for constructing it in so frail and shammy a manner.

Travelling Press.

The Massachusets regiment is said to contain fifty or more printers, who have taken with them a small printing press and font of type, for the purpose of publishing reports of progress, &c &c. We should like the favor of an exchange.

At Maiden Creek in Berks county, Penn., an apple tree has this year yielded two crops of fruit. One of the first growth measures about three inches in diameter, and one of the second an inch and a quarter.

A new Gas Light Company has recently been formed at Lowell for the purpose ot lighting that city, and especially the factories with gas.

It now appears by official returns that the number of our soldiers killed in the battles of Monterey is only 57 instead of 550 as reported.

The splendid new woolen factory at Utica is lighted throughout with gas. This precedent should be followed in all our large factories.

A new and beautiful English gold coin has been issued having the portrait of the Queen, and worth about $25.

Notwithstanding the scarcity of bread in England, the quantity of grain used in the breweries during the last year is stated at 22,682,223 bushels.

At Germantown, Ohio, the thermometer, for several days, ranged from one to five degrees below zero.

The present session of Congress will terminate in thirty days, but it is expected that an extra session will be required.

A bill to abolish capital punishment in Pennsylvania, was introduced in the House of Representatives of that State on Friday.

LATE FROM EUROPE.

The steamship Hibernia arrived at Boston on Monday, with papers twenty seven days later than previous intelligence. Her arrival was announced through the Atlantic cities, and Albany Buffalo and Toronto, before she reached the dock at Boston; and immediately after, the principal items of news were communicated by Telegraph.

The price of American flour has advanced to nine dollars per barrel, and that of cotton to fourteen cts a pound. The Hibernia is said to have brought upwards of $1,200,000 in specie. —The President's Message has been received in England, and rather severely handled by press.—The number of beggars in England and Ireland has been recently increased by thousands: in Ireland many are dying of debility and disease formed by starvation.—The government of Russia, by a recent decree exempts from taxes, all Lavonian peasants who will embrace the *national* religion. Of course all the honest part of that community will cheerfully pay the taxes for the privilege of being thus distinguished.

From Mexico.—Recent intelligence has been received, but containing nothing interesting.

Plenty of Chases.

About five hundred of the decendants of Thomas and Aquilla Chase have recently assembled at Newbury, Mass., for the purpose of investigating their claims to the *three million estate* which has recently fallen to the heirs of the Chases.

A bill has been introduced into the Senate of Ohio, which proposes to sell, for six months the services of all colored persons who return to a township, after having been expelled from it.

Mr. Samuel White, of Bristol, R. I., has sold 600 bushels of onions which are destined for the London market. They may bring tears to the eyes of John Bull.

"My umbrella is a regular Catholic," observed a waggish fellow on a rainy day.

"How so?" inquired a friend.

"Because it always keeps *lent*."

The circus at Albany contributed $205—the whole proceeds of an exhibition, without the deduction of a dime for expenses, to the Orphan Asylum.

A valuable slave has been liberated by the decision of the District Courts of New Orleans, on account of having been taken to Europe by her mistress and returned.

The weather has been severly cold at New-Orleans. Ice has been formed nearly sufficient for skating, and remained all day unthawed.

The anniversary of Franklin Union No. 1, will be celebrated in the Broadway Tabernacle, on Tuesday evening, Feb. 6. Mr. Gough has been engaged to deliver address.

In Mexico, they believe the sooner a child dies after its baptism, the better; as young innocents suffer no purgatorial imprisonment.

A lady asked her physician whether snuff was injurious to the brain "No," said he, "for nobody who has any brains ever takes it."

There are three brothers in Kentucky—Nathaniel Burrows, aged 86 Edmund 84, and Samuel 82—having a sister 78—aggregate 830.

Eli Whitney of New Haven, is manufacturing one thousand of Colt's revolving pistols for government.

Mrs. Madison and Mrs. Hamilton, at Washington, are waited upon to balls by special committees appointed for the purpose

In the Virginia regiment, there is a company from Stanton, having twenty men, each over six feet high.

Three thousand men are employed in the great Russian machine shop, under the superintendence of the Yankees Messrs. Norris.

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THE BELL OF THE ATLANTIC.

BY C. F. STERLING.

"For several days after the wreck of this steamer, her bell, swung by the wind or the motion of the waves, continued toll over the scene of the melancholy disaster."—NEW YORK PAPER.

Mournfully, mournfully, over the wave,
Heavily swinging,
Dolefully ringing,
Over the perished and over their grave,
Over the resting place God to them gave,
Tolls the bell!

What thinks the mariner passing the shore,
Listening sadly,
While the winds madly,
On his reefed canvas ragingly pour,
As the rough billows foam, break and roar,
Tolls the bell!

Warningly, warningly, heard he its tone,
And as he listened,
Bright the wave glistened,
Fogless and clear the winter moon shone,
As 'crost the waters far spread and lone,
Toll'd the bell!

Terribly, forcefully, blows the wind on,
Sweeping by boldly,
While the stars coldly,
Shivering rays shed, the blue seas upon,
And as the wave-crests fire helmets don,
Tolls the bell!

Snow-clad and icy, the coast gleamed afar,
Seems the shore whitest,
Seems the wave brightest!
But vainly he seeks the beacon's glad star,
That warns from the reef when on the hid bar
Tolls the bell!

Little the mariner deemed as he pass'd
That the bell tolling,
Sadly was knolling,
Many souls' requiem—swung by the blast,
Or that waves rolling 'gainst a lone mast,
Toll'd the bell!

Nothing the mariner reck'd then or though
How the storm-demon,
Terror of seaman!
Oft by him fearlessly, dauntlessly, fought,
Over the death and the woe it had wrought,
Toll'd the bell!

Oh! had he known that arm'd in its might,
To its aid calling,
Death the Appalling!
The bleak blast unfetter'd its wrath in the night,
And as the dying sank down in affright,
Toll' the bell!

To God who then spared him he would have bow'd—
Bow'd with humility,
Childlike docility,
Learning how feeble is man, daring, proud;
Praying for those o'er whose watery shroud
Toll'd the bell!

CHAGRIN FALLS, CUYAHOGA CO., (O.)
January 11, 1847.

Mr. Porter.

In perusing the Scientific American dated Jan. 2d I discover a description of a water wheel by Mr. Geoge Gay Jr. of Westford, N. Y. being just like one I am engaged in building; with this difference, that I use four floats instead of two, and that I use a second flume or penstock which is attached to the main flume, and situated over the front or driving half of the wheel for the purpose, that the water may raise in it till the volume is of a sufficient force to drive the wheel.

If you will give this an insertion in your valuable paper as soon as practicable you will much oblige,

Yours &c. ADIN GAUNTT.

Profits of Bees.

R. R. Childs, Pittsfield, Vt. thinks keeping bees very profitable. He says one of his neighbors has realized more profit the last four or five years in the produce of honey than any other man in Pittsfield with five times the amount of money invested in any other way We intend to have something to say on this subject soon, and present a new, novel, and peculiar plan for a series of ornamental hives.

Practical Mechanism.

Some author has observed that "the due cultivation of practical manual arts, has a greater tendency to polish and humanize mankind, than mere speculative science, however refined and sublime it may be." At the first perusal of this, we might not consider it altogether true; but upon a more close and critical, the veracity of the quotation will become more and more apparent; for although it be true that a poet, by his lofty imagination and felicity of diction, may be able to captivate the heart and subdue it to a softer feeling for the human race, and enlarge its powers, these writings are perused by comparatively a small portion of the community. A Blair, a Sherlocke, or a Taylor, may write on the beauty of religion and morality, with the "tongue of men or of angels," but still few peruse them with that attention to render service to the mass of mankind. But a cultivator of the practical manual arts, the moment he has invented a piece of mechanism of great utility to man, renders to every person, be his situation what it may, a work which sets every intellect more or less enquiring into its properties and effects; it is a silent monitor of the vast stretch of which the power of thought is capable of attaining; it speaks with a "still small voice" to the idle, the thoughtless, and the dissipated—"See what my fellow man is capable of doing, and why should I spend my days in sloth and obscurity? my powers of mind are as capable of comprehension as the inventor's, and yet I am going to the grave unknown." Among all the nations of antiquity, civilization and urbanity of manners kept pace in a community with the improvement of the citizens in mechanical and scientific attainments.—The invention of the screw, the lever, the telescope, the art of printing, in fact every useful discovery, tended in its practical effect to soften the manners, to enlarge the heart, and to render man in the aggregate more happy, elevated and kind to his species. This subject has never, perhaps, been considered so thoroughly as it should be. It strikes us that this is a matter for enquiry, which would amply repay the trouble of investigation; that it would be productive of immense utility to mankind, and tend to elevate the inventors of useful mechanical arts to that rank in the world they so richly deserve.—*Mechanics Journal.*

Test for readily distinguishing Iron from Steel.

To distinguish iron from steel by a chemical process, take pure nitric acid, dilute it with so much water, that it will only feebly act upon the blade of a common table knife. If a drop of the acid thus diluted, be suffered to fall upon steel, and allowed to remain upon it for a few minutes, and than washed off, with water, it will leave behind a black spot. But if a drop of this acid be suffered to act upon iron in the same manner, the spot will not be black, but of a whitish grey color The black stain is owing to the conversion of the carbon of the steel into charcoal, which thus becomes predominant, and iron being nearly free from carbon, can produce only a grey stain.

The utility of this test is not confined to finished articles manufactured of steel, but its application enables the workmen in iron and steel to ascertain also the quantity and uniformity of texture of unfinished articles.

The Tongue.

A white fur on the tongue attends simple fever and inflammation. Yellowness of the tongue attends a derangement of the liver, and is common to bilious and typhus fevers. A tongue vividly red on the tip and edges, or down the centre, or over the whole surface, attends inflammation of the mucous membrane of the stomach or bowels. A white velvety tongue, attends mental diseases. A tongue red at the lips, becoming brown, dry and glazed, attends typhus state." The descriptions of symptoms might be extended infinitely, taking in all the propensities and obliquities of mental and moral condition. The tongue is a most expressive as well as unruly member

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An Albany paper speaking of the weather, excuses itself from chronicling all the changes therein, as such a task would require the employment of an extra clerk.

The Physical Sciences.

The following facts in relation to the physical sciences, are condensed from Dick's General Diffusion of Knowledge: "The physical sciences are of the greatest utility in almost every department of art. To masons, architects, ship-builders, carpenters, and every other class employed in combining materials, raising weights, quarrying stones, building piers and bridges, splitting rocks, or pumping water from the bowels of the earth—a knowledge of the principles of mechanics and dynamics is of the first importance. By means of these sciences the nature of the lever and other mechanical powers may be learned, and their forces estimated—the force produced by any particular combination of these powers calculated—and the best mode of applying such force to accomplish certain effects, ascertained. By a combination of the mechanical powers the smallest force may be multiplied to an almost indefinite extent, and with such assistance man has been enabled to rear works and perform operations which excite astonishment, and which his own physical strength, assisted by all that the lower animals could furnish, would have been altogether inadequate to accomplish. An acquaintance with the experiments which have been made to determine the strength of materials, and the results which have been deduced from them, is of immense importance to every class of mechanics employed in engineering and architectural operations. From such experiments,—which have only been lately attended to on scientific principles,—many useful deductions might be made respecting the best form of mortices, joints, beams, tenons, scraphs, &c.; the art of Mast making, and the manner of disposing and combining the strength of different substances in naval architecture, and in the rearing of our buildings. For example—from the experiments now alluded to, it has been deduced, that the strength of any material depends chiefly on its depth, or on that dimension which is in the direction of its strain.—A bar of timber of one inch in breadth, and two inches in depth, is four times as strong as a bar of only one inch deep; and it is twice as strong as a bar two inches broad and one deep, that is, a joint or lever is always strongest when laid on its edge. Hence it follows, that the strongest joist that can be cut out of a round tree is not the one which has the greatest quantity of timber in it, but such that the product of its breadth by the square of its depth shall be the greatest possible. Again, from the same experiments it is found, that a hollow tube is stronger than a solid rod containing the same amount of matter. This property of hollow tubes is also accompanied with greater stiffness; and the superiority in strength and stiffness is so much the greater as the surrounding shell is thinner in proportion to its diameter. Hence we find the bones of men and animals are formed hollow, which renders them incomparably stronger and stiffer, gives more room for the insertion of muscles, and makes them lighter and more agile, than if they were constructed of solid matter. In like manner the bones of birds, which are thinner than those of other animals, and the quills in their wings, acquire by their thinness the strength which is necessary, while they are so light as to give sufficient buoyancy to the animal in its flight through the aerial regions. Our engineers and carpenters have, of late, begun to imitate nature in this respect, and now make their axles and other parts of machinery hollow, which both saves a portion of materials and renders them stronger than if they were solid."

Wisdom for the Young

Is the title of a beautiful volume, excellent as beautiful, just published by J. C. Riker, 129 Fulton St. is edited by L. D. Dewey, and consists of the advice of Chief Justice Hale to his children, and opinions of distinguished Americans on the Bible and the Sabbath, and some well written and valuable papers by the editor.

This is a book that every christian and patriot would rejoice to have read by the youth of our country. It is a work for this nation. It will preserve a model of the American character, and perpetuate our free institutions.—Let it be read by all, especially by mechanics.

The Iron Mountain in Missouri.

The Iron Mountain proper is about a mile and a half long, and about one mile broad—or rather more than a section of land; while the Pilot Knob is twice as high as the Iron Mountain, but has not as much surface. Here you travel upon nothing but iron lumps as far as the eye can reach; there you see the whole top of the mountain forming one sheet of iron. Here they have penetrated but ten feet into the ground—the surface iron being all, too, large lumps—while on the Pilot Knob, they have penetrated, on the summit and at the base, at least 259 feet. The iron ore found here is of the richest kind; it yields at least 60 per cent of pig metal, and I saw but very few slugs lying about the furnace. At St. Louis they prefer the pig iron from the Iron Mountain to that of Tennessee. The company intend making, in a short time, 20 tons per day, or 7,500 tons per annum. It would pay a profit to export the ore to the other States for smelting, where fuel is more abundant. The supply of the ore in this region is inexhaustible.

The Iron Mountain is one mile broad, four hundred and forty-four feet high, and three miles long. The lumps of iron increase in size ascending towards the summit. The Pilot Knob is the highest peak of mountains in the whole neighborhood, and cannot be less than fifteen hundred feet high; it is said to be a mile from the base to the summit, but this appears highly incredible. The iron ore is micaceous oxide of iron, but not a magnetic oxide, as some former writers have called it.

The material in the Pilot Knob has never been used for casting purposes, but some few years ago, edge tools were manufactured from the crude ore. The quantity of pig iron produced at present is about ten tons per day, performed by four discharges in twenty-four hours, but the present furnace having given way, it must be replaced by a more substantial and larger one, which is estimated to produce twenty-four tons per day. The distance from the Iron Mountain to the landing place on the Mississippi river is 40 miles, and it costs only one quarter of a cent a pound for transportation.

The Rose among the Thorns.

A pious man, who lived deeply grieved and afflicted in the midst of his persecutors, once walked sadly up and down his garden, almost doubting as to the care of Providence. As if held fast, he stopped before a rosebush, and the spirit of the rose thus addressed him—"Do I not give life to a beautiful plant! a cup of thanksgiving (full of sweet perfumes,) to the Lord, in the name of all the flowers: his offering of incense. And where do you see me? Among thorns. But they do not sting: they protect and give me my juices. Thy enmies do likewise: and should not thy spirit be more firm than a fading flower? The man went away strengthened; his soul became a cup of thanksgiving for his—enemies.

A Reverend Volunteer.

The Rev. W. H. T. Barnes, is a volunteer in Captain Naylor's company from Philadelphia, en route for Mexico. No one will dispute that clergymen have as good a right to fight as other folks; and we presume some would not regret to see an entire regiment of these volunteers.

The Happy Man.

An eastern caliph, being sorely afflicted with *ennui*, was advised that an exchange of shirts with a man that was perfectly happy would cure him. After a long search, he discovered such a person, but was informed the happy fellow had no shirt.

A succession of Bars.

A musician forsook his bars of music for the bar of a tavern, which soon brought him to the bar of the bench, and this was quickly succeeded by the grated bars of a prison, from which he effected his escape by means of a crow bar! but being re-taken, was *ar-bar*-ously conducted to the elevated bars of the scaffold.

Telegraph in Canada.

The Telegraph Company formed at Montreal have advertised for contracts for the construction of a telegraphic line between Montreal and Toronto. Arrangements are in progress for extending the line from Montreal to Halifax.

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NEW INVENTIONS.

Cask Heading Machine.

A correspondent writing from Brunswick, Me. informs us that a machine for cutting out and chamfering heading for casks, has been recently invented and put in successful operation in that place, and cuts out a 32 inch head in less than one minute. The following is given as a brief description, though it will not be readily understood without an illustrative cut or drawing.

The outer frame consists of two upright posts, with two horizontal girths. On the lower girth lies a circular table, in which a number of brads or spirs are inserted to prevent the pieces from spreading after being jointed and dowelled. Between the girths is a sliding frame to which is attached a plane or spoke cylinder of a diameter to suit the heading to be cut. This cylinder is confined to the sliding frame by a hollow iron shaft, on which is a tight and loose pulley for propelling the machine. Through this shaft extends an iron rod, on the lower end of whieh is confined a clamp or collar which is pressed down by a weight or lever to hold the boards upon the table containing the spurs as before named. In the outer surface of the cylinder are grooving tools or cutters confined by keys or screws. The sliding frame is pressed down by a lever and raised by a weight or spring. In connection with the grooving tools are cutters for leveling the chime.

This machine was invented by Messrs. B. H. Meder and J. Fuller, who have taken measures for securing a patent.

Claims for Patents.

BY E. D. TIPPETT.

Dec. 17, 1846.

Improvement in Washing Machines.

What I claim therein as new, and desire to secure by letters patent, is the manner of combining the washer and tub, as herein described, by means of which various thickness of clothes may readily pass through between the extreme inner periphery of the tub and the washer when driven by the centrifugal force, created by the motion of the tub, to its extreme inside.

—

BY SAMUEL WINROTT.

Dec. 15, 1846.

Improvement in Cooking Stoves.

What I claim as my invention, and desire to secure by letters patent, is the arranging and combining the fire chamber, placed below the oven, with the flues and damper, *m*, in such a manner that the flame and gaseous products of combustion can be carried from the fire chamber around four sides of the oven, substantially as herein set forth.

—

BY HOSEA PIERCE.

Dec. 10, 1846.

Improvement in Machinery for making Segars.

What I claim is the lower slide with its hinged matrix. in combination with the upper slide, stop and gate arranged for the purpose set forth

—

BY SEWALL FOLSOM.

Dec. 17, 1846.

Improvement in Ladies Skirts.

Having fully described my invention, I do not claim the introduction of any substance by weaving; nor do I claim the catching up of cords by sewing them into the cloth of the skirt; but what I do claim and desire to secure by letters patent, is the method of applying the spring materials to the cloth of the skirt, by giving them the spiral, diamond, or circular, or angular, or other curve, and irregular forms, so as to break up the plain horizontal lines by connecting them with other or not, as herein more fully described, for the purpose of forming self-adjusting skirts.

—

BY R. F. STEVENS AND L. B. PITCHER.

Dec. 28, 1846.

Improvement in machinery for ascending Inclined Planes.

What we claim as our invention, and desire to secure by letters patent, is the combination of the grippers, clamps or catches A, with the endless chain D, as described, in such a manner that they will seize the rail F as they come down from over the front wheel E, and release it as they rise upon the rear wheel E, for the purpose and substantially as described.

—

BY EDWARD D. FIPPETT.

Dec. 28, 1846.

Improvement in Meat Cutters.

Having described the combination and arrangement of the several parts composing my meat cutter: what I claim therein as new, and desire to secure by letters patent, is the combination of the grooved tub with the revolving knife as herein described, with the combined relative motion with the tub and knives as herein set forth, whereby the meat is kept continually in motion and thereby presented to the knives in various and changing positions.

—

BY JAMES R STAFFORD.

Dec. 28, 1846.

Improvement in Cooking Stoves.

What I claim as my invention, and desire to secure by letters patent, is the combination with the cooking stove of an air chamber between double plates, placed or continued on the sides of the fire chamber opposite the oven. in the manner and for the purpose described; the object of this air space being to prevent a radiation of the heat from the outer surfaces of the stove on the side to which are affixed the double plates, and the air when heated therein by absorption is then conducted under and into the oven for the purpose of heating the same, or it may be used for heating apartments, when not needed in the oven, or for the purpose of increasing the draft of the stove.

—

BY ETIENNE MACCAUD.

Dec. 28, 1846.

Improvement in Gas Apparatus.

What I claim is: First—the creation around the burners of a hot air reservoir (by the means of my metallic or other web fig. A) heated by its proximity to the focus of the combustion, which keeps the flame from all cold air, and from all streams of the external air, however feeble they may be, so that the air which feeds the flame which comes to it, by the single aspiration of the heat and not by the external force of the atmospheric currents. Secondly—I claim the placing a similar web, as represented with regard to fig. 1, on the top of the glass, when a current of air is found to proceed from above and beat down upon the glass, and this second part of my invention I claim only in conjunction with the first part thereof.

—

BY JEREMIAH CARHART.

Dec 28, 1846.

Improvement in Bellows for Musical Instruments.

What I claim as my invention, and desire to secure by letters patent, is making an exhausting bellows for reed instruments, consisting of two chambers combined with each other, and with the reeds placed above, so that the chamber next the sounding board shall be enlargep by a weight on the first flap, substantially as herein described, whereby the leather valve is prevented from sagging when stretched by use, and making noise by striking the valve seat as described.

—

BY SAMUEL D. ANTHONY AND DAN. BARNUM

Dec. 22, 1846.

Improvement in preventing incrustration of Steam Boilers.

We claim as new, and as our own discovery by practical research and experiment, and desire to secure by letters patent of the United States, the application and use of mahogany saw dust, for the purpose of preventing or lessening the formation of any injurious scale on the metal of which boiler flues are formed, substantially as above described.

—

BY MRS. FRANCES CARTER.

Jan. 2, 1847.

Improvement in Uterine Supporters.

What I claim as my invention, and desire to secure by letters patent, is the making use of two uterine supporting pads C C, arranged in such a manner as to act on the pelvis each side of the labia, and also their combination with an abdominal and a dorsal pad, or with either of them, substantially as herein set forth.

—

BY CLINTON FOSTER.

Jan. 2d, 1847.

Improvement in Harvesting Machines.

What I claim as my invention, and desire to secure by Letters Patent, is the combination of the cutting and threshing apparatus herein described in one harvesting machine. In connecting the knives separately with the respective rods L, and the eccentricities M, and their arrangement and combination with the guides G, and the cutting plate L.

—

BY NATHAN PARKINS.

Jan. 2d, 1847.

Improvement in Excavators for Roads, &c.

What I claim as my invention, and desire to secure by Letters Patent, is combining the scraper with a wheeled carriage or cart, in such a manner that it may be thrown into or out of action, and be regulated by an attendant upon the cart, by means of the elevating and depressing levers and the scraper handles, the whole being combined and operating substantially in the manner and for the purpose herein set forth, using for the construction any material that will best suit my purpose.

—

BY C. BOARDMAN AND J. A. WELLS.

Jan. 7th, 1847.

Improvements in Clocks.

What I claim as my invention and desire to secure by letters patent, is the placing the driving spring and fuzee on the same shaft, connecting the same to the movement frame of the clock, and the combination of the same with the barrel F, and movements of the clock substantially in the manner and for the purpose herein set forth.

—

BY IRA HOLMES.

Jan. 2d, 1847.

Improvement in Carriage Wheels.

What I claim as my invention, and desire to secure by letters patent, is the herein described method of inserting metallic spokes in carriage wheels, in combination with the making of the hub in two parts, one fitting within the other, substantially as herein described, whereby the spokes are firmly held in place and prevented from working loose by the jarring of the wheels; and also any one of them can be taken out for repairs and reinserted by making the hub in two parts, as above described.

—

BY JAMES MONTGOMERY.

Jan. 7th, 1847.

Improvement in Spark Arresters.

What I claim as my invention, and desire to secure by letters patent, is the mode herein described of creating draft in chimney stacks by means of the screw fan (A) attached to plate (H) placed at the top of the stack, substantially in the manner described. And I also claim the above in combination with the perforated casing (F) and shield (K,) and in combination therewith the tube or trunk (E) and valve (G) placed within it, all in the manner and for the purpose described.

—

BY ALONZO HEATON.

Jan. 13th, 1847.

Improvement in Machinery for Raising Sheet Metal.

What I claim as my invention and desire to secure by letters patent is the combination of the concave A, with the cone B, for raising or making concave a plate of tin or other metal as described.

—

BY ISAAC CROSSETT.

Jan. 13th, 1847.

Improvement in Knives for Cutting Staves.

What I claim as my invention and desire to secure by letters patent, is the particular manner of combining and arranging the particularly constructed cutters B, E and A, with the scolloped backed stock as above set forth.

—

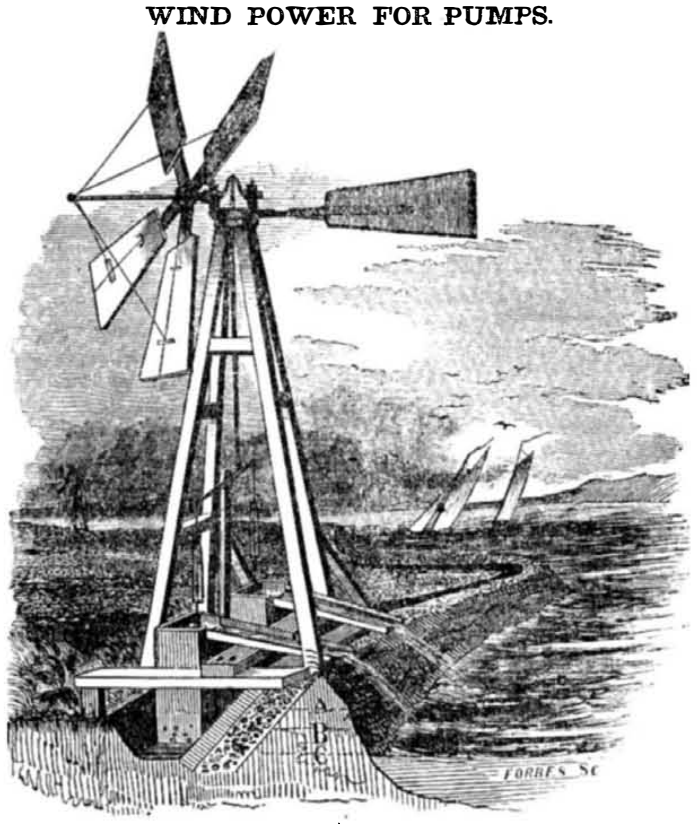
BY JAMES INGRAM AND JAMES STUART.

Jan 13th, 1847.

Improvement in Water Closets.

What we claim as our invention and desire to secure by letters patent, is surrounding the basin with a dip flanch, when this is combined with the pan for containing water, substantially as described, whereby the escape of noxious odors, is prevented when the basin is removed, and the necessity of uniting the basin with the top of the trunk avoided, as described.—And we also claim the second jointed pan for preventing the escape of odors when the first pan is opened, when this is combined with the first pan, substantially as described.

WIND POWER FOR PUMPS.



The machine here represented for raising water by wind power, was invented and has been put in operation in several places by Mr. D. L. Farnam of this city. The construction, connection and operation of the machine is readily understood by the engraving without definite reference. It will be seen that the wind wheel is mounted on a small horizontal circular cap, which occasionally revolves or changes its position circularly to accommodate the direction of the wind. The pitman which is connected to the crank in the rear, or leeward of the wind wheel, extends down to a horizontal lever, mounted on a centre post, and each end of the lever is connected to the piston rod of a square pump below. This is one of the most simple and effective methods that has ever been introduced for raising water for draining lands, or supplying reservoirs for the p rpose of irrigation. These or similar machines should be extensively introduced and used for the purpose of draining stagnant ponds and pools in marshy places in the vicinity of villages, and which frequently vitiate the atmosphere, and prove deleterious to the health of the residents.

A large woollen factory has been built in Auburn, and machinery of a very superior quality for carpet weaving is put up.

The suspension bridge over the Niagara river below the falls is to be 800 feet long, and 200 feet high. It will be a great curiosity.

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NEW YORK, JANUARY 30, 1847.

The Street Beggars.

We have observed with regret in two or three papers of this city, representations directly calculated to diminish the already miserably scarce and stingy exercise of benevolence towards the wretched victims of poverty who occasionally appear in a soliciting attitude in the streets. It is well known that there are many persons, old, young and infirm in this city who have no employment nor means of earning a subsistence, but who have been refused and denied admission and relief at the Alms House, and some of them actually perish in the streets or in some miserable cellar or den for want of food and clothing: and it does appear contemptibly mean for any writer of a public journal, to endeavor to deter other people from contributing to the relief of those distressed beings, under the plea that some of them are intemperate, or possibly imposters. It is evident that the person who can write such articles, is possessed of a degree of meannes greater than can be gratified by refusing the least contribution himself, and induces him to desire to close the hearts and pockets of others also. What if there are some cases of imposture or intemperance among beggars? it is not our prerogative to pass judgment on them. It is enough for us to see the pale and emaciated features, and the bare feet on the icy pavement, to satisfy us at least that they earn their scanty pittance by severe service, and it is better to contribute a trifle to an unworthy object, than to refuse one who is actually suffering the severities of honest poverty.

The War Balloon.

Mr. Wise, of Lancaster, has published another communication relative to the construction of a War Balloon, by which, or rather from which to batter down the walls of St. Juan d'Ulloa. He says that a balloon 100 feet in diameter, would sustain a weight of 32,713 pounds, and after making due allowance for the weight of the materials, the net work, harness, ropes, car, ten men in the car, and proportion of weight of manouvering cable, he secures a net power of 20,842 pounds for missiles, bombs, &c. However wise Mr. Wise may be on this subject, he will find our Uncle Sam too wise to employ so much gas against the San Juan castle.

The Effect of Capital Punishment Laws.

The recent trial of A. G. Tirrell at Boston has resulted in an acquital as ridiculous as that of his former trial, and on the affected supposition that he was as *fast asleep* when he set the house on fire, as when he murdered his paramour. If the penalty in either case, had been perpetual imprisonment instead of death by hanging, there is (in the minds of many) no doubt but that he would have been convicted.

P. S. Since writing the foregoing, we understand that Tirrel on being indicted for the crime of adultery, instead of pleading somnambulism, as was expected, plead guilty, and was forthwith sentenced to three years in the State Prison.

An Ice Mountain in Oregon.

De Smet, an English missionary, in writing to the Freeman's Journal from Oregon says:

"Not far from the place of our encampment we found a new object of surprise and admiration. An immense mountain of pure ice, 1500 feet high, enclosed between two enormous rocks. So great is the transparency of this beautiful ice, that we can easily distinguish objects in it to the depth of more than six feet. One would say by its appearance, that in some sudden and extraordinary swell of the river, immense icebergs had been forced between these rocks, and had piled themselves on one another, so as to form this magnificent glacier. From the base of this gigantic iceberg, the river Trou takes its rise.

Iron Rails in England.

We are indebted to an eminent mercantile firm in New York, for the following extract of a letter, giving the results of practical experience in England on this subject. They say "it has been ascertained by practical experience in England, that the *rail*, necessary for rapid movement over it, or for the conveyance of merchandise, should be heavier than the rail now in use there. We extract from a letter now before us—written by a practical and intelligent gentleman in England, largely interested in railroads now under construction in the United States, and of course desirous that said roads should be well constructed for speed and heavy traffic—says, (under date of 2d December, ultimo:) "The experience we have obtained here, is, that the usual weight of iron heretofore used, of say sixty-five pounds to the yard—will not suffice for the rails—if the speed of travel and weight of traffic is to be carried forward. Our express trains now travel from forty-five to fifty miles per hour, and carry enormous weight of merchandise, which has already led to the necessity of changing the weight of rail to 80 pounds per lineal yard—and many are calculating on the necessity of going to one hundred pounds per yard—as a matter of economy to guard against the necessity of taking up a lighter and laying down a heavier rail. We call your attention to these points, and request you so to state it to the companies now constructing roads, in which we may be stockholders—that they may avail of our experience in this country as a guide to a right const uction of a road intended for rapid travel and conveyance of produce and merchandise."

Our own observation has led us to the same conclusion; and we have no doubt but that on all our *main* lines, rails of 75 to 100 lbs. to the yard will be ultimately used; it is therefore important that they should as far as possible, be constructed originally with the heavy rail.—*R. R. Jour.*

Gumption.

There is nothing a man needs so much to help him along in the world, as the faculty expressed in the above homespun phrase. To us Yankees, it expresses the natural tact which a prosperous, go-ahead man of the world is supposed to possess in a good degree. A man may have intelligence, honesty and good judgment, but without this non-descript, inherent quality, he is always like the Irishman, going ahead backwards. How many hard heads and obtuse brains we find pushing along like a locomotive, just because they have that certain something, which nobody can describe, to help them along. This "gumption" works unseen, like the lightning on the magnetic wires, and the greatest things are often produced by it, when not the slightest external action is perseptible. Somebody has made some pretty acute remarks on this subject, and arrived at the conclusion that gumption—is gumption, and "nothing else." Here they are:—"This is a Yankee word, which we have always admired as singularly forcible, conveying a definite meaning which cannot be otherwise expressed save by the circumlocutory sentence which should always be avoided if possible We say of a man, 'he wants gumption,' and we could not more clearly depict his mental character, were we to write a volume on the subject.—A man who lacks gumption is generally a very harmless man, or more fool than rogue.—He is a credulous man, and is easily imposed upon. He may be a business man or a scholar but he is deficient in decision of character, and will always be destitute of that tact or insight into human nature which constitute what in every day language is called 'a knowledge of the world' In a word, he is a man who—who—*lacks gumption.*"

Quick Time to Hartford.

The Hartford Courant states, that the Hartford and New Haven Railroad Company are about to contract for a new boat of a high order, for the passenger business alone, which it is expected will make the passage between New Haven and New York in about four hours—When the track between Hartford and New Haven is relaid with heavy rail, the trip between New York and Hartford will be made in a little over five hours.

The Magnetic Telegraph.

W. B. Lloyd, Esq., the agent of the new company for the establishment of the magnetic telegraph from Washington to New Orleans, was recently in this city upon business connected with this matter, We are informed that a contract has been entered into by the patentees of Morse's telegraph, to establish this line by way of Charleston, Mobile, and numerous other intermediate points of commercial interest. Books of subscription to this stock, the whole amount of which is estimated at less than $200,000, will soon be opened in this city, and the great importance of the line will, we feel confident, commend it to favorable consideration.

It is thought probable, says the North American, that Congress may take some action on the subject, and aid its speedy construction as a war measure, in the way of loan, for it would place the cabinet at Washington in almost immediate communication with the army and navy in the Gulf, and incalculably facilitate all operations.

The telegraph is destined to wield a mighty influence in the commercial world: and it seems to us that merchants should be the most anxious to further its extension. Its days of experiment and the thousand difficulties attendant on all new discoveries, have been overcome, and hereafter, it will be looked to, not only as a useful but a profitable investment. In point of importance, no terminus will be more valuable than New Orleans, and if the different companies, now rapidly forming, keep their charges down to the lowest rates, they will have as much business as they can desire.

It is hoped and believed that a sufficient amount of this stock will be taken up at once, say $25,000, to enable the contractors to commence the line from Petersburg, Va., towards New Orleans, by the middle of March next. If Congress gives a loan to the company, as is expected, the whole line, from Washington to New Orleans, can be finished in six months. There can now be no question that the stock of the magnetic telegraph is one of the most *profitable* of all the profitable investments which can be made; and as the invention is perfected, and all the difficulties attendant upon the early experiments are overcome, it is no longer a matter of doubt whether the thing will pay. There certainly can be no route which may be rendered more advantageous to those interested, in a pecuniary point of view, than that which connects the "Crescent City" with New York and the East. We learn from reliable authority, that the New York and Baltimore line of telegraph has earned its stockholders ten per cent on their investment for the last six months, equal to at least twenty per cent. per annum, though the line has been interrupted by breaks much of the time. The Albany and Buffalo line, we understand, is now paying 28 per cent. on the cost, or 14 per cent. to stockholders, and this, too, in its first year!

On the 29th ult., upon the opening of the branch line from Harrisburg to the Ohio river, a message in reference to the U. S. volunteers, was transmitted from Pittsburg to Harrisburg, thence to Philadelphia, thence to Baltimore, and thence to Washington, *in eight minutes.* During the existing war with Mexico, what estimate can be placed upon the value of this powerful agent for the transmission of important news from New Orleans to Washington! Or, what price may be set upon the utility of this invention in communicating intelligence from one extreme of the Union to the other, so far as the interests of the mercantile community is, at all times concerned! Its value must increase, and those who embark in it cannot fail, we think, to reap a satisfactory profit.

The books of subscription have been opened at the Exchange in this city, and also at the Franklin House, and we have no doubt that Philadelphia will do her share in this great enterprise.—*R. R. Journal.*

The Oldest Inhabitant.

The Mechanics Journal says that Mr. T. G. Rowley, of Granville is one hundred and eighty seven years of age; and that he keeps a tavern, tends his own bar and enjoys excellent health. He must be a very tough old man, or this statement is a tough story; perhaps both.

The Emperor of Russia.

The Emperor, says Dr. Baird, is about fifty years old, and seems to be in perfect health, and moves about among his people in the most fearless manner A few weeks ago he was in Warsaw, and did not hesitate to go on foot, openly among the crowd, which was before his palace at night; just as if he were a common man. A poor carpenter fell from a house in that city, and was killed, just as the emperor passed in his carriage. Instantly he sprung from his carriage, took up the dying man in his arms, and did every thing that he could for him. When he saw that life was extinct, and not till then, he entered his carriage again. The next day he sent a very handsome sum to the poor afflicted father of the unfortunate man. If a fire occurs at St. Petersburgh, he is at it as soon as possible, and so is his son, the heir apparent; and no men are more active in trying to put it out.—On such occasions, the emperor is often seen among the men, taking hold with his own hands, and doing all that he can. He is certainly no common man.

A Word to Boys.

The Learned Blacksmith says, "Boys, did you ever think that this great world, with all its wealth and woe, with all its mines and mountains, oceans, seas and rivers, with all its shipping, its steamboats. railroads, and magnetic telegraphs; with all its millions of darkly groping men, and all the science and progress of ages, will soon be given over to the hands of the Boys of the present age? boys like you, assembled in school rooms, or playing without them, on both sides of the Atlantic? Believe it, and look abroad upon your inheritance and get ready to enter upon its possession. The Kings, Presidents, Governors, Statesmen, Philosophers, Ministers, Teachers, Men of the future, are all Boys, whose feet, like yours, cannot reach the floor, when seated on the benches upon which they are learning to master the monosyllables of their respective languages.

The Mystery Unraveled.

We published some weeks since an account of an extraordinary courtship and marriage on board one of the Mississippi boats, of a Spaniard from Matamoras to a young German widow who had just arrived in this country. It has more recently come to light that the young widow had at the time $20,000 in gold deposited with the clerk of the boat. Whatever private understanding existed between the clerk and the Spaniard in the affair, is left only to conjecture; but the couple appeared very happy, and the lady is supposed to have learned by this time to talk Spanish.

The Bed-room of Queen Victoria.

The private apartments prepared for the Queen and the Prince at Arundel Castle, says an English paper, are of remarkable elegance and splendor. The Queen's bedstead is unusually georgeous and superb. Massive posts, richly gilt and entwined with pearls, support the richest brocade silk hangings and canopy of crimson and gold, and the fringes of the curtains are of gold. The whole appointments of the rooms are of the richest and most costly description, all the table ornaments, candlesticks, and articles of the toilet being of gold.

To New Subscribers.

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FOREIGN CORRESPONDENCE.

No. III.

Infernal Machines—their usefulness—The Long Range—Gun Cotton—Telegraph Improvement—A Problem, &c.

LONDON, Dec., 1846.

My dear Sci.—

There are some Christian people who are always shocked to hear of the invention of new war engines. such as *monstre* guns, explosive shells, &c., and who argue that forsooth, that these are evidences of increasing war spirit in the age. Not a bit of it, with due deference to their opinion; I believe with the bias given to the world by commerce, intercourse between nations consequent upon steam, and the action of science and art opening the eyes of men to their *own* interests in the matter, renders every new "infernal *mauchine*," torpedo or what not, a decided blessing; and there could not have been selected a more suitable name for that unfortunate cannon of the Princeton, than "Peace-maker," bating the accident of course. The more this capacity for "unheard of" missiles developes itself over the world, the more cautious men will be about going to war, with whom, they know—but with what, they know not. There is nothing that keeps the thievishly disposed man out of his neighbor's garden better than a fear of hidden traps. Syracuse was defended for a long time by a single man, who had spread terror in the beseiging army with his new and terrible engines, so that it only required the sight of a loose or a huge stone upon the city wall, to scatter legions of Roman soldiers, who ran, crying "another infernal machine!" Any thing to keep the world peaceable long enough to convince mankind that war is a butcher's game, invented by tyrants for private ambition rather than general good, and then we shall want no war machines at all. Men have been cajoled and bullied on to battle fields, rather because they did not consider their own rights and chances, and knew nothing of the delights of peace; than from any actual love of military glory. Now, when there is a pretty general cessation of arms, and he who was a soldier, returns to his home, altars and green fields, and amid his happy household enjoys the fruits of honest toil in all tender affections, it will be found a hard and most difficult matter to lead him away again to the tented fields.—His soul is no longer "in arms and eager for the fray," but quite to the contrary, he abhors all wars that are not founded in justice, or for defence. What great savage lubber I wonder first took it into his head that war was necessary at all, or *honorable* among human beings. A savage he must have been, for surely there is no civilized man much less Christian, who would not yield nine points by concession, rather than seize a butcher knife, and risk his own life and take his brother's, for the ten.—Can it be that the *men* who have done the world's fighting, have ever considered that they were at the end only the sacrifice of designing kings, robbers and crafts, that used them as stepping stones to place and power, in ninety-nine cases out of a hundred forging burtherns for their own backs, and fetters for their own limbs? With very few exceptions wars are national murders, and when individuals attempt to carry out this national principle, they are hanged by the neck. Isolate societies, families, nor single men are allowed to practice this *honorable* game on a small scale, for when reduced, so that you can see it enormity clear of smoke, trump, or drum din, it is a horrible thing. How have we estimated human life—dog cheap, since there are always millions left living to weep for the dead thousands.

There was a time when the fate of the earth hung upon one human life, which destroyed, had left the world a wilderness; a life, that God set in a seal of his own image, and deemed it worth spreading out the heavens filled with shining stars for, and the earth beautiful with fruit and flowers, and redolent with the music of birds, and the murmur of silvery streams. There is not one human less precious in the sight of God—not one given with a narrower design of destiny—not one that should be less dear and true to itself—its kinlink, and the universe. I am astonished at the *sang froid* with which men reckon upon the price of territories and conquests, when human life which is man's demonstrated all, is at stake. You men with the nodding plume let us see you try the test. Suppose the cost of the achievement is a thousand lives, just call yourself one of that thousand and what ransom would you not give to evoke your fate? Your plumes, your spurs, your gold lace, and "cross of honor,"—yes you would give them all, and cry with Richard, "My kingdom for a horse!" You, empire robbers and plotters, do not mean to die yourselves—no! but you would sacrifice those whose lives like a thread in a web when broken, leave the web also in ruins. I am rejoiced at every horrible invention that can serve through fear if nothing better to open men's eyes. Hills and valleys, yesterday golden with grain, but now trampled and bloody—cities, that were this morning gay with cheerful busy life, now a charred and smoking ruin; races of men enjoying peace, plenty, and all the delights of association in one day, converted into furious monsters thirsting for heart's blood—all this has not opened men's eyes, and I hail the secret thunders and fulminations that promise to do what nothing else has done. I looked upon Warner's long range as a missionary truly Christian, though of iron creed; and I am sorry it failed. It was tried at Anglesea, and though reaching its venom three miles, fell four miles short of the proposed target. It has been, therefore, condemned by the Board of Ordnance, and I am sorry for it. It has already worked an effect upon the public mind, and the sanguine prediction that it could split the rock of Gibraltar and shiver a seventy-four gun ship with unerring precision at a blow, made fighting men look wise and blue. And I rejoiced when Gen. Cotton and Gen. Sawdust grew into a day's wonder, to make men tremble again for their lives; but these, too, are pronounced against. I saw a series of experiments with the cotton by a most eminent chemist, and was sorry that the romance of terror was set aside, and the cotton declared no useful monster after all. Your people are experimenting with it I see, but they will find the same difficulty in the end that influenced the Board of Ordnance to decide against it here. Its liability to spontaneous combustion, its bulk, and the fact of its leaving a steamy vapor in the gun that renders the second charge, if put in suddenly, useless. But never mind, the idea of dangerous weapons, and the fear of them, is abroad and widening, and good will come of it. La Verrier's Planet is discovered, happily that is no humbug, though the scholars of Cambridge seem to think it has been too often hinted and squinted at by other astronomers, to allow Verrier's name to attach to it. I think they are over nice in their strictures, and am heartily glad it was named before they could thieve away the honors and give a title to it. And I observe that your famous Poughkeepsie Clairvoyant lays claim to having been in communication with the planet, long before Verrier's announcement, why did he keep it so secret, mesmerists are generally inclined to spread their discoveries. There has been an improvement of the electric telegraph patented since I wrote you last, by a Mr. Highton of Rugby, and purchased by the Telegraph Company.—This Telegraph science is another peace maker, and its perfection can but interest every one who feels with the spirit of the times.—The improvement consists in the substitution of a slip of metallic leaf, with a magnet placed near it, for the old wire and magnetic needles. The benefits are, first, cheapness—a couple of coils and needles used in the old way cost say $100; corresponding apparatus on the new plan about $5, making a difference of 1000 per cent. Secondly in delicacy—a single cell battery with the new apparatus will work thro' 100 miles of wire. Thirdly, greatly increased rapidity—gold leaf being of such light weight and consequently without momentum immediately after the signal is made, drops down without oscillation or swinging, which is always taking place with the needles. Fourthly, by a slight change in the construction of the keys, or handles, which serve as commentators, double or treble the number of signals may be made with each slip of gold leaf, to what can be made with needles. Fifthly, portability: one of the gold-leaf apparatusses may be carried about in the pocket, and applied to use for any temporary purpose, at any point in the country, in a minute or two.—Sixthly, in consequence of the cheap and simple nature of the apparatus, a large reserve may always be kept ready for use at each station, so that if one be damaged by lightning or other cause, another may be substituted in a few seconds. Seventhly, the slightness of resistance to the electric current; the resistance of each coil at present is equal to about six miles of wire; whereas, that of a slip of gold leaf is equal to only a few hundred yards. Having these advantages it must soon entirely supercede the use of needles. But I must close, and will give you a problem I came across yesterday:—"During 50 years of missionary labor, 400,000 Pagans had been gathered into the Christian fold by the preaching of American missionaries. The average increase of slaves in their own country is about 70,000 per year, whom to teach to read the Bible is a penal offence. Now, if 8,000 Pagans are annually evangelized abroad, and 70,000 native Americans heathenized at home—required the time when "the knowledge of God shall cover the earth, as the waters cover the sea."

S. D. C.

Phrenology applicable to the Horse.

Mr. Thomas J. Lewis observes that while reading Dr. Combe's celebrated work on Phrenology, his attention was particularly directed to the article on page 205, in relation to the horse. "It is there shown," it is said "that the shape of the brain, even in the lower animals, indicates their good or bad disposition.—Almost every one," he continues, "is aware that the value of the horse is very much enhanced by his being docile and tractable. According to the article alluded to, when the organ of benevolence is largely developed, the animal is mild and docile; when it is small they are vicious, ill natured and intractable. In the horse, the organ is placed in the middle of the forehead, a little above the eyes. When this region is hollow, a horse is invariably vicious and inclined to bite and kick. In mild and good natured horses, on the contrary, this part extends out as far as the eyes, or even farther. "The driver of a cabriolet at Neuilly," says Dr. Gall, "bought at a low price a horse which nobody could use, on account of its extremely bad temper; but it was an excellent runner. In the first week it bit off two of the driver's fingers and one of his ears.—He attempted to correct the evil by redoubled blows, but these only rendered the animal more vicious. He then resolved to try the effect of gentle treatment, and this succeeded to a certain extent. The organ in question was very small in this animal; and the same conformation will be found in all horses which require to be muzzled to prevent them from biting."

Weary Travellers.

During the passage of the ship Clarissa Andrews, recently arrived at New Orleans, two carrier pigeons alighted on the rigging of the vessel, and were readily secured. The position of the Clarissa Andrews, with regard to *terra firma*, was Cape Finisterre, (Spain,) the nearest point, bearing E. S. E., 400 miles distant; and the Land's End, (England,) N.E. by E. 660 miles. The wind at the time was fresh and strong from the south, foggy and cloudy weather. The birds have the distinct characteristics of their race, but bore no note or label about them. These adventurous travellers were no doubt blown off their direct course by a heavy gale of wind, and in the wild waste of waters over which they were wandering, they gladly came down on the first object which offered them a resting place.

The United States Also.

A sheriff of Providence once concluded the announcement of the opening of the Supreme Court at that place, with the usual form; '*God save the State of Rhode Island and Providence Plantations.*" "You forget," said the Judge mildly, "this is the United States Court." Nothing daunted, our sheriff answered, "Oh yes, our honor," and bawled out in continuation—'*and the United States also.*'

Mammoth Panorama.

Banvard's three mile panorama of 1200 miles of scenery on the Mississippi, is now on exhibition at Boston. Perhaps he will make a call at this "village," when sufficiently at leisure.

Ventriloquism.

The uncertainty with respect to the direction of sound, is the foundation of the art of ventriloquism. If we place ten men in a row at such a distance from us that they are included in the angle within which we cannot judge of the direction of sound, and if in a calm day each of them speaks in succession, we shall not be able with closed eyes to determine from which of the ten men any of the sounds proceeds, and we shall be incapable of perceiving that there is any difference in the direction of the sounds emitted by the two outermost. If a man and a child are placed within the same angle, and if the man speaks with the accent of a child without any corresponding motion in his mouth or face, we shall necessarily believe that the voice comes from the child; nay, if the child is so distant from the man that the voice actually appears to us to come from the man, we will still continue in the belief that the child is the speaker; and this conviction would acquire additional strength if the child favored the deception by accommodating its features and gestures to the words spoken by the man. So powerful, indeed, is the influence of this deception, that if a jackass placed near the man were to open its mouth, and shake its head responsive to the words uttered by his neighbor, we would rather believe that the ass spoke than that the sounds proceeded from a person whose mouth was shut, and the muscles of whose face were in perfect repose. If our imagination were even directed to a marble statue or a lump of inanimate matter, as the source from which we were to expect the sounds to issue, we would still be deceived, and would refer the sounds even to these lifeless objects. The illusion would be greatly promoted if the voice were totally different in its tone and character from that of the man from whom it really comes; and if he occasionally speak in his own full and measured voice, the belief will be irresistible that the assumed voice proceeds from the quadruped or from the inanimate object.

When the sounds which are required to proceed from any given object are such as they are actually calculated to yield, the process of deception is extremely easy, and it may be successfully executed even if the angle between the real and the supposed directions of the sound is much greater than the angle of uncertainty. Mr. Dugald Stewart has stated some cases in which deceptions of this kind were very perfect. He mentions his having seen a person who, by counterfeiting the gesticulations of a performer on the violin, while he imitated the music by his voice, riveted the eyes of his audience on the instrument, though every sound that they heard proceeded from his own mouth. The late Savile Carey, who imitated the whistling of the wind through a narrow chink, told Mr. Stewart that he had frequently practised this deception in the corner of a coffee-house, and that he seldom failed to see some of the company rise to examine the tightness of the windows, while others, more intent on their newspapers, contented themselves with putting on their hats and buttoning their coats. Mr. Stewart likewise mentions an exhibition formerly common in some of the continental theatres, where a performer on the stage displayed the dumb show of singing with his lips and eyes and gestures, while another person unseen supplied the music with his voice. The deception in this case he found to be at first so complete as to impose upon the nicest ear and the quickest eye; but in the progress of the entertainment, he became distinctly sensible of the imposition, and sometimes wondered that it should have misled him for a moment. In this case there can be no doubt that the deception was at first the work of the imagination, and was not sustained by the acoustic principle. The real and the mock singer were too distant, and when the influence of the imagination subsided, the true direction of the sound was discovered. This detection of the imposture, however, may have arisen from another cause. If the mock singer happened to change the position of his head, while the real singer made no corresponding change in his voice, the attentive spectator would at once notice, this incongruity, and discover the imposition.

(*To be concluded.*)

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TO CORRESPONDENTS.

As a reasonable apology for delay in answering or noticing the favors of our correspondents we may mention that some of their communications are so carelessly and improperly written that it takes two or three weeks to read them. We may also improve the occasion to suggest the propriety of addressing letters on scientific and mechanical subjects to the editor, and those on business connected with the circulation &c, to the publishers

"Y. of Amesbury."—We shall answer this but briefly because you chose to withold your name. With regard to the propeller referred to, we have not a full description on hand.—The wind wheel described contains some points of excellence, is preferable to the old fashion, and would sustain a good patent.

"A. G. of C."—Noticed in another calumn.

"G. P. C."—The instrument proposed to be constructed by you will be, or would be if so constructed, immensely valuable,—worth ten times the price you name. Only give satisfactory assurance that it will be done, and you can raise the money required in two hours.

"A. L. K. and R. B. W."—Answered by letter.

"F. G. W. of W."—We thank you for the intelligence. The steam carriage which you describe as having been put in operation at Brattleboro is the same in every essential principle as the one described in No. 6 of this paper, only you have not mentioned the *equalizing* arrangement by which the power is equally applied to both driving wheels when running on curves. We have been long convinced of the practicability of constructing light carriages to be propelled by steam on common roads, and are glad to learn that there are any engaged on the subject.

"E. J. M. of E.—We shall give the intelligence concerning window springs. But why have you not seen the article containing the rule for finding the diameter of a circle of a given area? It was published in No. 17, page 131.

"Subscriber."—You may be a subscriber or you may not. Your communication evinces, we regret to say, much ignorance on a certain subject. At least your admonition is gratuitous, and we do not olame the concealment of your name.

"H. W. E. of G."—A water ram may be made to raise a small quantity of water on the premises which you describe: but we should give the preference to a small submerged water wheel, either the re-action on the curved float water wheel described in No. 12. You will have a good plan for raising water by wind power in this paper; but for the purpose you describe, a small forcing pump, one inch calibre and four or six inch stroke is all you will want. You might be furnished with a water wheel and pump for 10 or 12 dollars.

"D. G. S."— We shall re-examine your propeller, and probably write you a proposition.

"Z. E. C. of N."—Your plan for a distance reporter is excellent, and we think you would do well to have an engraving made of it to accompany a description. This course will secure evidence of priority of invention until you are ready to apply for a patent. It appears to be original, and the expense of drawings &c. for the Patent Office will not exceed 12 dollars. We cannot furnish the back numbers of vol. 1, which you name—we cannot buy them of subscribers.

A Western Cargo.

The steamer Charles Carrol, recently cleared from Cincinnati with 4475 bbls. pork, 1273 bbls. lard, 150 half bbls. and 4017 kegs of lard 713 bbls. flour, 155 bbls. beef, 400 bbls. and 31 hhds. hams, 449 bbls. whiskey, besides beeswax, ginseng, corn, oats, hemp, rope, tobacco, 100 kegs of pigs feet, butter, ale, &c.

Pun Military.

A young officer of the volunteers, in allusion to the small size of the barracks, compared them to *nutshells*, on which a wag congratulated him with the prospect that by living in a nutshell he might attain to the rank of a *kernell*.

BLACK LEAD POTS.—The subscriber offers for sale in lots to suit purchasers, a superior article of BLACK LEAD POTS, that can be used without annealing. The price is low, and founders are requested to make a trial.

SAMUEL C. HILLS,
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Office on F street opposite Patent Office.

He has the honor of referring, by permission, to—Hon. Edmund Burke, Com. of Patents; Hon. H. L Ellsworth, late do; H. Knowles, Machinist, Patent Office; Judge Cranch, Washington, D. C.; Hon. R. Choate, Mass., U. S. Senate; Hon. W. Allen, Ohio, do; Hon. J. B. Bowlin, M. C. Missouri, Hon. Willis Hall, New York; Hon. Robert Smith, M. C. Illinois; Hon. S. Breese, U. S. Senate; Hon. J. H. Relfe, M. C. Missouri; Capt. H. M. Shreve, Missouri. j23

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FOR 1847. VOLUME IX.
O. S. FOWLER, EDITOR.

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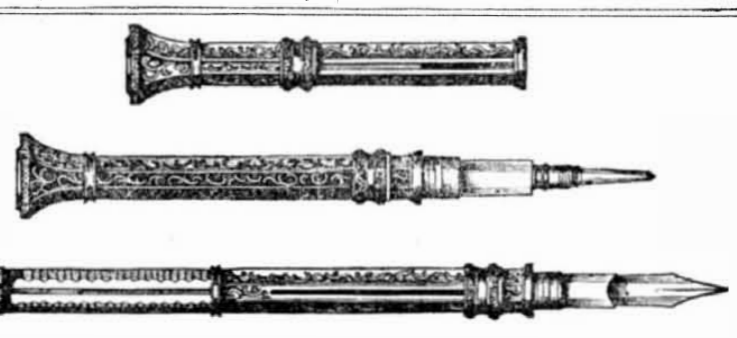

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CURIOUS ARTS.

Introduction of Arts.

Formerly the name of ebony was given to numerous beautiful woods, and the workmen employed upon them were called *Ebenists.*—Besides the common black ebony, there was red, yellow, purple, &c. Although this is no longer the case at the present day, the name of Ebenist is still applied in France to those who work in mahogany, walnut, ash and elm.

This is an ancient art ; it was first practised in Asia, and afterwards in Greece, at the time of Alexander's victories ; it soon spread to Italy, and was much esteemed at Rome under the Emperor, and highly thought of by all rich citizens After the disorders caused by the northern invasion, it gained renewed splendor in the fifteenth century, contributing much to the beauty of the Vatican ; whilst in all other countries the furniture was ugly and ungraceful. It was not until the end of the reign of Francis I., that it was cultivated with success in France, and in the beginning of the last century this art underwent many changes.—The French ebenists, from that time, have surpassed in good taste and in talent, those of all Europe, and even of England, the only country which ever disputed the pre-eminence with them.

In ancient times, there were no locks on the doors. "People were contented," says Milline, "with a fastening of string." Although this was a poor and ineffectual mode, a better one was soon adopted. A bolt was placed tradsversely across the door, on the inside, (as is still done in some parts of the country,) in the bolt was fixed an oval piece of iron which served to fasten the door —This piece of iron was hollowed, and a sort of screw answered the purpose of a key. In order to shut or open the door from the outside, the hand was put through a hole made over the nut or screw.

The Lacedemonian lock was invented soon after. This is formed of a piece of hard wood, six inches high, four inches broad, and one inch thick In this are made four or five longitudinal grooves or mortises, three and a half inches broad, and three-quarters of an inch deep, which are occasioned by tenons or forelocks of hard and heavy wood, moving freely and independently of each other. The bolt is arrested by these tenons, which, descending vertically, oppose its exit ; which cannot be effected except by raising the tenons with the key.

A great improvement was afterwards made in locks by placing the bolt in an iron capsule for greater safety. The same may be said of the Lacedemonian key. Sometimes a second bolt was placed on the inside, and could not be opened externally.

After the return of the expedition to Egypt, wooden locks of great strength and solidity, although roughly made, were exhibited. Similar ones have been found in Pompeii and Herculaneum. This same lock has been handed down from antiquity, for more than four thousand years in Egypt, where it is still used for the gates of houses, cities and public places. The Turks, Arabs, and Greeks of the Archipelago, have also adopted it. In France, great improvements have been made in locks in the last hundred years. Destriches, Damour and Gerard, have obtained a reputation in this line all over Europe.

M. Charles Dupin relates the following facts Locks were formerly unknown to the lower classes. Every one understands that Little Red Ridinghood's grandmother called to her from within, "Pull the bobbin and the latch will fly up ;" and with this old woman, so was it with all. At the present day the peasant has a much surer method of securing his doors and windows.

Formerly in city houses, the windows, which opened like a folding door, were closed at the foot with an upright bolt of wood ; but this has long been replaced by one of iron.

Watch and clock-making, the origin of which is unknown, reappeared in 760, and continued until the twelfth century, with no very great improvements until the discovery of the pendulum by Galileo, which being applied to it in the beginning of the seventeenth century, there arose a great spirit of emulation among the clock and watch-makers, such as Lebon, Leroy, Gaudron, Enderlin, Thiout, Rivez, Duterbe, Romilly, Lepaute, Berthoud, &c., who added new discoveries, giving to France a just renown

The goldsmith's art, that of working in gold and silver, obtained great importance in Europe at the time of the discovery of America, which circumstance provided an increase of metals. Nevertheless, it was not until the middle of the seventeenth century that it rose to any height in France.

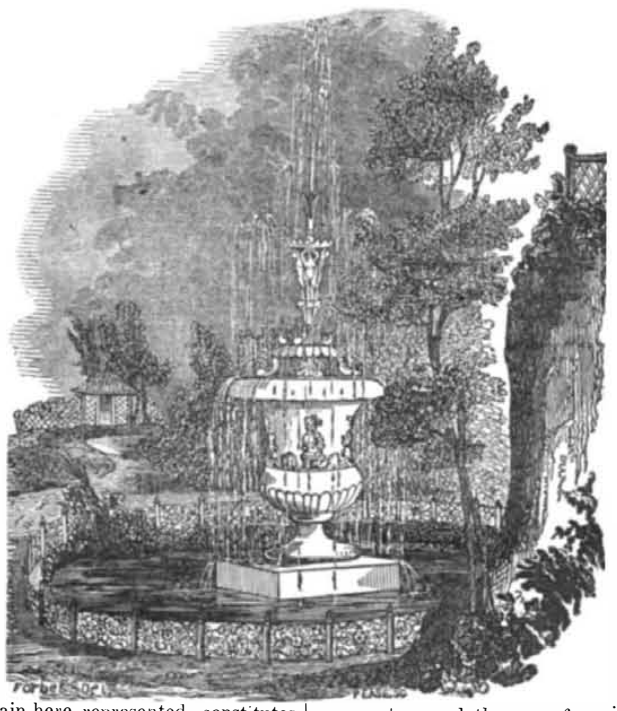
Carving, or sculpture in bas relief, on metals, has improved greatly. Ballin and Thomas Germain were already very skilfull in this at the beginning of the eighteenth century, and acquired an incontestable celebrity by their beautiful handiwork.

We cannot help feeling some surprise when we consider the very trifling progress made in masonry, not in its principles; but in their execution, which may be said to have long remained stationary. Observe the manner in which foundations are laid, and displaced earth removed ; the scarcity of materials, and the difficulty of transporting them from place to place. Every thing is done by the arm, or by means which should belong to an uncivilized nation, whilst, four thousand years ago, the Egyptians, and other nations now extinct, used machines for lifting stones, earth, &c. Nevertheless, a very mediocre intellect could supply this art with numerous improvements, valuable for saving time and labor.

Walls, among the ancients, were built of large stones, or bricks, two deep, and the interstices filled up with fragments of stone, &c. rudely thrown in, and which were united in a mat, with mortar. Vitruvius recognizes two species of masonry, the *inertium*, which he regards as ancient, and the *recticulatum*, which he indicates as in use in his day, which was twenty-seven years before Christ. In fact the aqueducts of Lyons and Frejus, and most of those in the vicin ty of Rome, the mausoleum of Augustus, &c are constructed in this manner. At the present day we sacrifice solidity to beauty of appearance.

The machine for raising the water of the Seine to the top of the Marly mountain, carrying it down again, and thence to Versailles, is, undoubtedly, the greatest invention of the time of Louis XIV. The elevated situation of Versailles, in the department of Seine-et-Oise, presented innumerable difficulties to the accomplishment of this vast project. But the age of Louis XIV. so fertile in superior minds, resolved one of the greatest problems in mechanics, and proved that there is no limit to human genius

FANCY URN FOUNTAIN.



The Fountain here represented, constitutes one of the series which we alluded to in our last number. It is truly gratifying to see correct taste so extensively prevailing with regard to artificial fountains. No object appears more grateful and refreshing to the sight in a warm sultry day, than a lively playing fountain of pure water : and there are few villages so situated as to be without the means of furnishing one or more public fountains from natural elevations. The cast iron fountains are more permanent, and being painted white or marble color, are quite equal in appearance to those made of marble.

It was begun in 1676, and put in activity in 1682. It cost 7,000,000 livres, and the maintenance of it amounted to 71,106 livres.

The mechanism of this admirable work, is the conception of a carpenter of Liege, who could not read or write, named Rennequin Sualem, from whom the idea was taken by the Chevalier Deville, who was acquainted with Sualem's talents.

When this poor man came to entrust his project to him, he hastened with it to Paris, and offered the plan to Colbert, who shortly afterwards, by dint of intrigues and impudence, caused it to believed that he was the inventor, and that the mechanic had been a passive instrument in his hands. So it is that the poor are sometimes the victims of the rich. Sualem retired to Bougival, where he had a house and there terminated a life of bitterness and disappointment.

Chinese Fete—Dwarf Trees.

One of the *attaches* of the mission sent by the French government to China, after the termination of the war, to negotiate a treaty of commerce, published an account of the voyage, from which we give the following description :—

"The *attaches* of the mission were very much astonished one morning to find the appearance of the two principal streets of Canton completely changed. Before each house was set a kind of stand or altar, of considerable size ; upon the different steps of these stands were placed figures in porcelain and cardboard ; by the side of these they remarked vases planted with fruit trees, scarcely a foot in height, the branches of which, twisted and distorted, bent under the weight of their fruit, which was of their natural size.

"The figures of cardboard and porcelain, the most eccentric the brain of a Chinaman could invent, were in continual movement.—Here, a Mandarin, of the first class, rolled his haggard eyes, and gesticulated his arms; there a soldier sabred nothing right and left; farther on a Chinese lady raised tenderly her languishing eyes, and fanned a large headed man, who each moment hung out an immense tongue. Time after time the fantastic images stopped as if fatigued with their exercise, but then the proprietors of the stands gave some strokes with a whip, and immediately the pantomime recommenced with renewed activity. There was enough in this to astonish the curious spirit of the French travellers. What caused these images to march to the tune of the whip? And these little trees so contemptible in appearance—the height of a foot !—carrying, each orange tree, twenty enormous oranges ? And each apple tree twenty or thirty large apples ? For the images the explanation was not difficult to find. The Chinese had introduced into the interior of them one or two mice, which, on being stirred, struck some wires, and thus communicated the movement to the limbs expressly jointed to produce this effect. When the mice slept, the cut of a whip aroused and affrighted them, and so redoubled the vivacity of the gestures of the images. As for the dwarf trees, there was in that a mystery of horticulture, or rather sylviculture, to divine. M. Renard had noticed, on visiting the apartments of the Mandarins, similar little trees of the height of some few inches, pitiful to look at, unhealthy, distorted, and covered with excoriations without number, and a thing which astonished him—the little foliage which ornamented the extremity of the branches, belonged to kinds that ordinarily attain an enormous size, such as the elm, the bamboo, and the cypress. M. R. arrived at the following solution of these eccentricities : That for the Chinese nothing is beautiful but what is hideous ; that a stunted shrub without leaves is a wonder that is worth all the forests in the universe ; and so the principal occupation of the Chinese nurserymen is to combat nature in every thing that is beautiful and rich."

An account of the training of dwarf trees by the Chinese cultivators follows, from which it appears they are at great pains to produce these monstrosities. The trees stunted by their processes sell at a high price ; and, what is surprising attain to extreme longevity,—some of them being one hundred and even two hundred years of age. Several specimens of dwarf trees were sent to the Queen from China.

Some letter writer at Washington calls the House of Representatives the great yeast pot of the nation.

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